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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,793	02/03/2004	Masahiro Inoue	Q79163	9251

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EXAMINER

PHU, SANH D

ART UNIT PAPER NUMBER

2618

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/769,793

Applicant(s)

INOUE, MASAHIRO

Examiner

Sanh D. Phu

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The IDS filed 2/3/2004 has been considered and recorded in the file.

Claim Rejections – 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Turnbull et al (US 6,407,712).

Regarding to claim 1, Turnbull et al disclose a dedicated communication on-vehicle apparatus (100) (Fig. 3 and 6) mounted on a motor vehicle(25) in a

Art Unit: 2618

dedicated communication system for an intelligent traffic system (see Fig. 1-6),
comprising:

- an antenna (50) having directivity in a predetermined direction (Fig. 3);
- a radio module (80) for performing transmission/reception of radio wave with road-side radio equipment by way of said antenna (Fig. 3 and 6); a

- data processing unit (110) for processing transmission/reception data transmitted/received by said radio module; and

- a box-like housing (54) for housing therein said antenna, said radio module and said data processing unit in a unitary structure (Fig. 3),

- wherein said box-like housing is adapted to be fixedly attached onto a windshield (20) of the motor vehicle with a mounting plate (56) being disposed on the radiation side of said antenna by means of an adhesive member (Fig. 3 and text portion), and

- wherein at least a radio wave aperture portion (70) of said mounting plate is made of a radio wave transmissible material (Fig. 1-3).

Claim Rejections – 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4, 6-7,9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turnbull et al.

Regarding to claim 2, Turnbull et al disclose a dedicated communication on-vehicle apparatus further comprising:

a substrate 5 (82) on which at least one of said radio module (see Fig. 4), wherein when said antenna (50) is so set as to be transmissible in a direction orthogonal to said substrate (Fig. 3).

Turnbull et al does not disclose said data processing unit is mounted on a substrate 5 and a substrate surface region located above an antenna transmissive planar region is greater than a substrate surface region located

Art Unit: 2618

beneath said antenna transmissive planar region. However, Turnbull et al disclose the processor is mounted outside of the housing (54) by connecting cable (85) and said antenna module (50) is mounted on the substrate (82) (see Fig.3 and 6).

Therefore, it would have been obvious for one skilled in the art at the time of the invention was made to integrate the outside processor mounted on the substrate and to align said antenna module on the substrate surface region such a way that said antenna module could receive a good signal since they have been held that rearranging/moving parts of an invention involves only routine skill in the art.

Regarding to claim 3, claim 3 is rejected with similar reasons as set forth in claims 1 and 2.

Regarding to claim 4, claim 4 is rejected with similar reasons in claim 2 that the rearranging/moving parts involve only routine skill in the art.

Regarding to claim 6, Turnbull et al disclose a dedicated communication on-vehicle apparatus wherein a plurality of through holes (84) are formed at

positions surrounding outer peripheral edges of said antenna on said substrate (see Fig. 3).

Regarding to claim 7, Turnbull et al disclose a dedicated communication on-vehicle apparatus wherein said antenna feeder line (84) is provided on the surface opposite to that for said antenna (Fig. 3).

Turnbull et al does not disclose said substrate (82) is implemented in the form of a multi-layer substrate, however, the Examiner takes Official Notice the substrate/the printed circuit board with multi layer is known in the art to prevent the cross-talk between the IC/the IC track.

Therefore, it would have been obvious for one skilled in the art at the time of the invention was made to modify the multi layer board/substrate so that the wiring between the ICs/the tracks would not have the cross-talk.

Regarding to claim 9, Turnbull et al disclose a dedicated communication on-vehicle apparatus wherein electrically conductive member (86) is disposed on circuit board (82) of said box-like housing except for a region corresponding to orientation of directivity (antenna toward the windshield) of said antenna disposed internally of said box-like housing (Fig. 3).

Art Unit: 2618

Turnbull et al does not disclose electrically conductive member is disposed on an inner peripheral surface or outer peripheral surface as claimed. However, the electrically conductive member is considered only a cable member providing the power or transmitting data to/from the electronic components of the antenna circuit. Therefore, it would have been obvious for one skilled in the art at the time of the invention was made to arrange the electrically conductive member such a way that it is fit in the housing so that the circuit is operable. These arranging parts of an invention have been held that it involves only routine skill in the art.

Regarding to claim 10, claim 10 is rejected with similar reason as set forth in claim 9.

Regarding to claim 11, claim 11 is rejected with similar reason as set forth in claim 9.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turnbull et al in view of Turnbull ((7,023,379).

Regarding to claim 5, Turnbull et al disclose a dedicated communication on-vehicle apparatus wherein said antenna is formed on said dielectric substrate (90)(see Fig. 4).

Turnbull et al does not specifically disclose said antenna is a micro-strip antenna.

Turnbull disclose said antenna is a micro-strip antenna (see col. 8, lines 19-20).

Therefore, it would have been obvious for one skilled in the art at the time of the invention was made to modify said antenna is constituted by a micro-strip, as taught by Turnbull, in order to prevent the interference between the transmission line.

7. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turnbull et al in view of Godo et al (5,295,753).

Regarding to claims 12-16, Turnbull et al does not disclose a dedicated communication on-vehicle apparatus further comprising:

a label carrying predetermined information and designed to be stuck on said mounting plate; and

Art Unit: 2618

a seal stuck on said mounting plate so as to cover said label.

wherein said seal is a semitransparent seal and capable of being peeled off to be used repetitively.

Wherein said adhesive member is constituted by a colored double-side adhesive tape shaped in a predetermined character pattern.

Godo et al disclose a process of making a colored label with double side adhesive and transparent tape that can be subsequently peeled-off as well as stuck/mounted on a desire surface (see col. 1, lines 12-41).

Therefore, it would have been obvious for one skilled in the art at the time of the invention was made to create/make a labeling by using label maker, as taught by Godo et al's process, so that a person/user is able to discriminate/know between the two products that are look alike.

Allowable Subject Matter

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding to claim 8, the prior fails to disclose a dedicated communication on-vehicle apparatus wherein a pair of feeder lines destined for supplying electric power to said antenna are formed accurately in the direction in which a distance between these feeder lines increases.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D. Phu whose telephone number is (571)272-7857. The examiner can normally be reached on M-Th from 7:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sanh D. Phu
Examiner
Division 2618

SP

SANH D. PHU
PATENT EXAMINER

11/15/06
